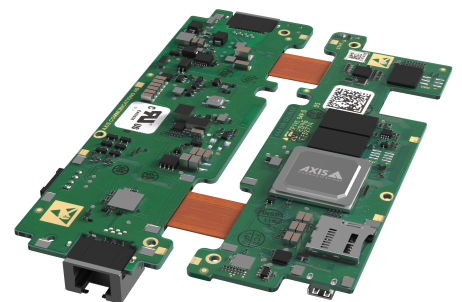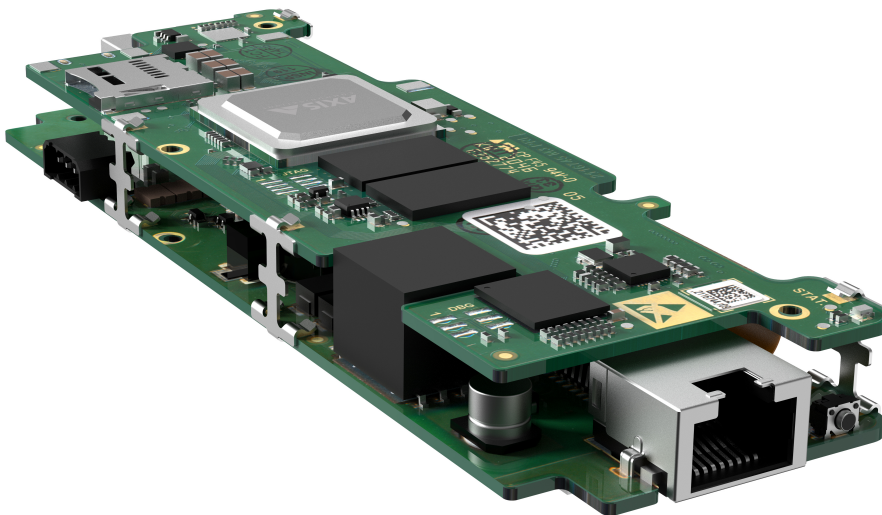# AXIS FA51-B Main Unit

Single-channel barebone with HDMI

This compact, single-channel modular main unit allows for discreet surveillance. It offers easy integration into other devices such as monitors and ATMs. This UL recognized component is designed to be integrated into a UL-certified product. Featuring an HDMI output, it's possible to display live video on a public viewing monitor. And, AXIS Face Detector highlights faces within bounding boxes to let would-be thieves know they're being monitored. It's compatible with all AXIS FA sensor units including IR sensor units. Furthermore, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis devices on your network.

> **Easy integration with other devices**
> **UL recognized component**
> **HDTV 1080p at full frame rate**
> **Discreet installation and surveillance**
> **HDMI output for public viewing monitors**

AXIS FA51-B Main Unit

System on chip (SoC)

Model
ARTPEC-6

Memory
1024 MB RAM, 512 MB Flash

Video

Video compression
H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles
Motion JPEG

Resolution
1920x1080 (1080p) to 160x90

Frame rate
Up to 25/30 fps in all resolutions

Video streaming
Multiple, individually configurable streams in H.264 and Motion JPEG
Axis Zipstream technology in H.264
Controllable frame rate and bandwidth
VBR/ABR/MBR H.264
HDMI

HDMI output
Single camera source
Playlist: single camera sources, still images
1080p 30/25/24 fps (50/60 Hz)
720p 50/60 fps (50/60 Hz)
576p 50 fps (50/60 Hz)
480p 60 fps (50/60 Hz)

Image settings
Contrast, brightness, sharpness, Forensic WDR, white balance, exposure control, exposure zones, compression, rotation: 0°, 90°, 180°, 270° including corridor format, mirroring, polygon privacy mask, control queue

Pan/Tilt/Zoom
Digital PTZ, preset positions

Network

Security
IP address filtering, HTTPS[1] encryption,
IEEE 802.1x (EAP-TLS)[1] network access control, multi-level user, Axis Edge Vault with Axis device ID

Network protocols
IPv4, IPv6 USGv6, HTTP, HTTPS[1], SSL/TLS[1], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, RTCP, DHCP, SOCKS, SSH, MQTT

System integration

Application Programming Interface
Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com*
One-click cloud connection
ONVIF® Profile G and ONVIF® Profile S, specification at *onvif.org*

Event conditions
Device status, edge storage, I/O, PTZ, scheduled event, video

Event actions
Toggle I/O, send images, publish MQTT, send notifications, overlay text, recordings, SNMP trap messages, status LED, video clips

Data streaming
Event data

Analytics

Applications
Included
AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard
AXIS Video Motion Detection, AXIS Face Detector, active tampering alarm
Supported
AXIS People Counter, autotracking
Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

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1. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

Approvals

Safety
UL recognized component

Network
NIST SP500-267

Cybersecurity
ETSI EN 303 645, BSI IT Security Label

Cybersecurity

Edge security
Software: Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, AES-XTS-Plain64 256bit SD card encryption
Hardware: Secure boot, Axis Edge Vault with Axis device ID, signed video, secure keystore (CC EAL4+ certified hardware protection of cryptographic operations and keys)

Network security
IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)[2], IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS[2], TLS v1.2/v1.3[2], Network Time Security (NTS), X.509 Certificate PKI, host-based firewall

Documentation
AXIS OS Hardening Guide
Axis Vulnerability Management Policy
Axis Security Development Model
AXIS OS Software Bill of Material (SBOM)
To download documents, go to *axis.com/support/cybersecurity/resources*
To read more about Axis cybersecurity support, go to *axis.com/cybersecurity*

General

Sustainability
PVC free, BFR/CFR free

Power
Power over Ethernet (PoE) IEEE 802.3af Type 1 Class 3, typical 5.2 W, max 6.82 W

Connectors
RJ45 10BASE-T/100BASE-TX PoE
RJ12 for sensor unit
4-pin terminal block for two configurable alarm inputs/outputs (12 V DC output, max. load 50 mA)
HDMI type D

Storage
Support for microSD/microSDHC/microSDXC card and encryption
Recording to network-attached storage (NAS)
For SD card and NAS recommendations see *axis.com*

Operating conditions
-20 °C to 50 °C (-4 °F to 122 °F)
Maximum temperature (intermittent): 60 °C (140 °F)
Start-up temperature: -20 °C (-4 °F)
Humidity 10–85% RH (non-condensing)

Storage conditions
-40 °C to 65 °C (-40 °F to 149 °F)
Humidity 10-85% RH (non-condensing)

Dimensions
Folded: 18.5 x 45 x 140 mm (0.7 x 1.8 x 5.5 in)
Flat: 17 x 92 x 140 mm (0.7 x 3.6 x 5.5 in)

Weight
67 g (0.15 lb)

Included accessories
Installation guide, Windows® decoder 1-user license, terminal block connector

Optional accessories
AXIS T8415 Wireless Installation Tool, AXIS Surveillance Cards, AXIS T8120 Midspan 15 W 1-port
For more accessories, see *axis.com*

Video management systems
Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at *axis.com/vms*.
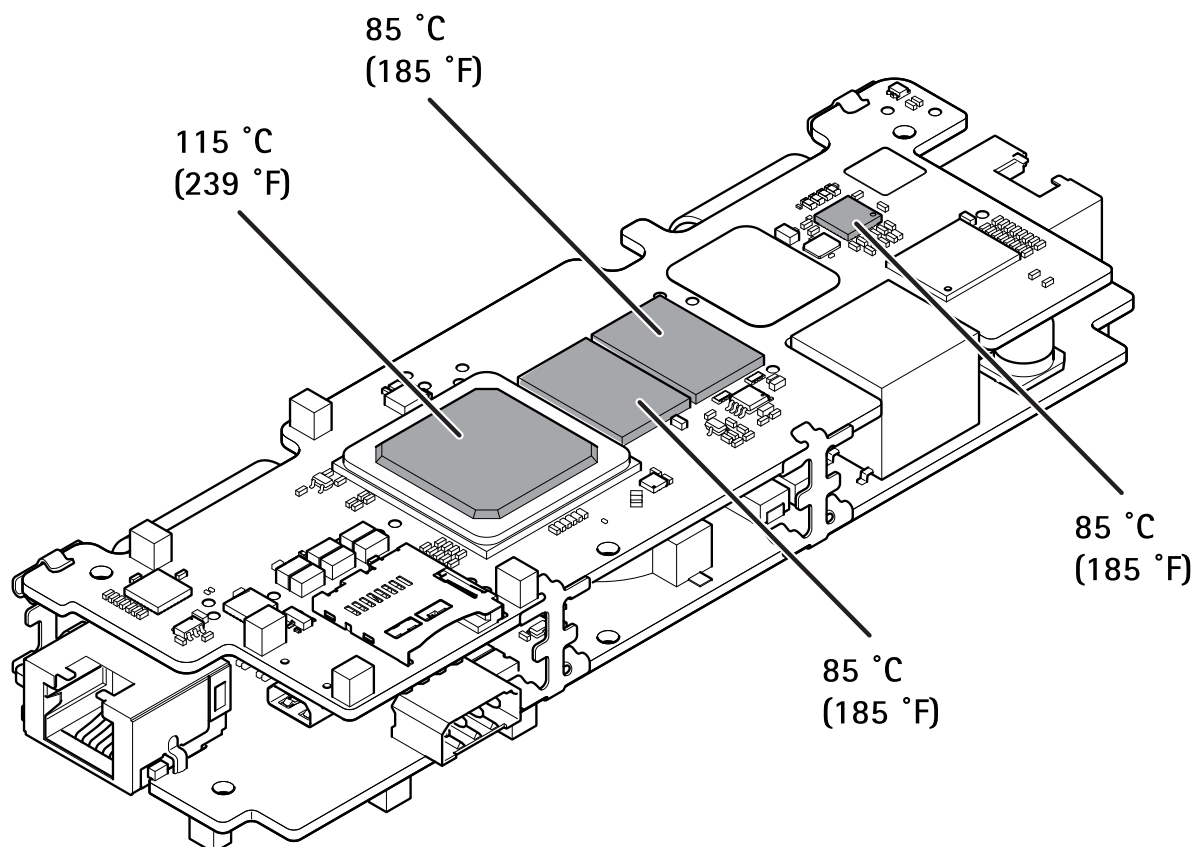
Languages
English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

Warranty
5-year warranty, see *axis.com/warranty*

2. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

85 ˚C
(185 ˚F)

115 ˚C
(239 ˚F)

85 ˚C
(185 ˚F)

85 ˚C
(185 ˚F)

Maximum allowable temperatures

AXIS
COMMUNICATIONS